

STAFF REPORT

CITY OF GREEN COVE SPRINGS, FLORIDA

TO: City Council Regular Session MEETING DATE: June 17, 2025

FROM: Scott Schultz, Asst. Water Utilities Director

SUBJECT: City Council approval of Sawcross (Tender Contractor) Change Order #4, in the amount of

\$73,666.13, to automate the waste sludge system. In addition, authorize staff to combine all Willaims (Bankrupt Contractor) Change Orders (2) and Sawcross Change Orders (4) into Contract Modification #4, and these costs be included in the final loan/grant package for the Florida Department of Environmental Protection (FDEP), State Revolving Fund (SRF), Harbor Road Water Reclamation Facility (WRF) Expansion, Phase 2, SRF

Agreement No. WW1000420.

BACKGROUND

Williams Change Order #1: \$6,345.19

The operations control room was designed with an extra large roof overhang so that the sidewalks would be covered. While installing the soffit utilizing the design it was apparent to the subcontractor that there was a more functional method to construct the soffit. Upon discussion with staff and the engineer of record agreement was reached on the modified construction method.

Williams change Order #2: \$97,501.70

- Contract Modification (CM) 2A: Modifications to communications switching and supporting
 equipment to standardize on materials and hardware that meet current GCS IT Standards.
 (Williams CO #2), \$9,783.41
- CM 2B: Extend perimeter privacy fencing limits east past substation and west to abutting parcel line to provide more noise and aesthetic protection to neighbors abutting the treatment plant fence line. (Williams CO #3), \$26,119.03
- CM 2C: Additional chemical feed vault per GCS Building Official permit review comments (Williams CO #4), \$1312.40
- CM 2D: Additional chemical feed piping per GCS Building Official permit review comments (Williams CO #5), \$4,278.97
- CM 2E: Additional emergency lighting requirement per GCS Building Official permit review comments (Williams CO #7), \$6,878.43
- CM 2F: Additional vault cover to address additional chemical feed vault per GCS Building Official permit review comments (Williams CO #8), \$991.01
- CM 2G: Material price escalation for overhead coiling doors due to American Iron & Steel compliance. Significant coordination with FDEP SRF Program staff required (Williams CO #9), \$43,772.95
- CM 2F: Increase exterior walkway width on the main treatment plant tank to enhance personnel safety and access for maintenance (Williams CO #12), \$4,365.50

Sawcross Change Order #1: \$34,360.00

Due to modifications to the design of the influent structure at the Harbor Road WWTF, a different coating material was required from the original scope of work. A review by city staff and the engineer of record changed the specification from Spectrashield to Epoxy-Tech. The difference in price is \$34,360.00

Sawcross Change Order #2: \$64,411.13

Task 1: During the Phase I construction (2021) of the Harbor Road WWTF modifications were performed on the sludge processing system which allowed flexibility in the use of the four aerobic digesters. Several plug valves were installed as a part of this process. There appears to have been a manufacturers defect in the valves as over time they have become almost impossible to operate (open / close). Additional modifications to the sludge processing systems are currently taking place as part of the Phase II construction. Excavations will be taking place near the faulty valves. Task 1 of this change order is to replace all of the plug valves with gate valves. Since work is taking place around the faulty valves, the majority of the cost is the valves themselves.

Task 2: Every two months an external vendor brings a mobile centrifuge onto the facility to process sludge (the byproducts removed during the sewage treatment process). The centrifuge has to be staged very close to the digester tanks. In addition, a very large portable generator has to be used to power the centrifuge which requires a significant amount of power (amperage). The designed staging location as part of the plant expansion requires the tractor trailer to "jackknife" in order to back into a very tight staging spot. During the summer this will ultimately result in scarring of the newly placed asphalt. Staff have created a different spot on the plant site that will be much easier to stage the tractor trailer. Task 2 of this change order is to relocate the suction piping and the electrical feed to the new location. The electric feed will eliminate the need for a generator to power the centrifuge.

Modification to CO#2 Approved by Council 3/4/2025:

Task 2: Sawcross did not include the \$11,046.33 cost of relocating the electrical panel in the original estimate

Task 3: The variable frequency drives have "tripped out" during the testing / recirculation of reclaimed water due to storm conditions. It has been determined that the inclusion of DV/DT filters in the electrical wiring will eliminate the sensitivity in the drives.

Task 4: The thermostatic protections for the electric motors that power the return activated sludge pumps were designed to be terminated in the programmable logic controller (PLC). The most effective location to terminate these devices is directly to the variable frequency drives (VFD).

Sawcross Change Order #3: \$15,579.57

The original facility design had the sewage from the Operations Control Room flowing to the in-plant system via gravity. Due to the contractor installing the building outlet pipe too low, the ability to utilize gravity was eliminated. This forced the installation of a lift station to pump the sewage from the building. A lift station utilizes electricity and creates a maintenance item for the life of the facility. This contractor error creates a latent defect as it was not visible and not detected until the time to connect the building sewer system to the in-plant system.

Sawcross Change Order #4: \$73,666.13

Remove existing 8" ductile iron gate valve and piping within work limits, Furnish and install new 8" piping, motor operated valve (MOV) and ultrasonic mag meter. Provide all electrical connections and wiring for mag meter and MOV. Provide all control updates to the operating system. The intent is to allow operator to set a defined wasting amount (gallons). Wasting of sludge is the most common source of human (Operator) error at a wastewater treatment facility and the negative results can be significant (overflows, etc.). This is a safety feature.

Williams Change Orders 1 &2, and Sawcross Change Orders 1-3, have already been approved by Council. Authorization from FDEP to bring the costs of these change orders into the loan/grant have been tentatively approved.

FISCAL IMPACT

\$73,666.13 (Sawcross Change Order #4) is the only fiscal impact that has not been previously approved by Council. Williams Change Orders have been previously approved by Council, and previously approved by FDEP to be added to the loan/grant. All change orders for this project add up to \$280,385.00, which is 0.02% of the original contract amount.

RECOMMENDATION

Approve Sawcross (Tender Contractor) Change Order #4, in the amount of \$73,666.13 to automate the waste sludge system. In addition, authorize staff to combine all Willaims (Bankrupt Contractor) Change Orders (2) and Sawcross Change Orders (4) into SRF Contract Modification #4.